

## Remarks

### Section 112 points in the original response

Re “self-correcting,” as questioned on Examiner’s page 2, the Examiner is referred initially to the first & third paragraphs of the Summary of the Invention. In particular, the device can recover immediately from an impact or blow. If the support is impacted and bent, it will, by itself, return to its original shape and configuration immediately on release of the deforming force that caused it to be bent. It has a shape memory which will enable it to return to its original shape after being distorted. Further, it is adapted to return to its original shape and/or orientation immediately on release of a force which caused it to become inoperable by altering its shape. Again, in the Description of the Invention, if the support is bent completely – even more than 90°, it will spring back (“self-correct”) to return to its original shape. That is, it will resume its original shape and form as soon as a deforming force is released, and it has a memory such that it will spring back to its original shape on removal of a bending or distorting constraint. The preceding phraseology is readily found in the description; see also the description of Figures 3a and 3b, which illustrate a typical distortion of the device followed by its self-correction after the forklift is gone. Applicant submits that “self-correcting” is not indefinite, and is readily understood in the context of the ample description of the flexible support.

The Examiner’s objection to claim 8 is not understood, and accordingly claim 8 has not been amended. Inserting “is” would require a further essentially complete rewording of the claim. As it is, the doorway is the environment for the device.

The above amendments to claim 13 address the other comments of the Examiner under Section 112. The amendments are proposed to leave no question about antecedents, and to fully clarify the capabilities of the flexible support. In the amendments, a distinction is observed between the “door” and the “doorway.”

## Section 112 points reviewed

The examiner has not specified in what respect the response was not fully responsive except to say that applicants failed to address all of the 35 USC 112 second paragraph rejections. Therefore the examiner's rejections will be taken up claim-by-claim, as in the official action of 12/15/2004.

**First**, the examiner says *"In claim 1, line 1, the phraseology 'self-correcting sensing element' is not readily understood. Exactly what is meant by 'self-correcting'. It appears that the sensing element is 'flexible' and/or 'resilient'."* Please note that the preamble includes the term "device" – thus it is a self-correcting sensing element device, not simply a self-correcting sensing element. The generally elongated support member, which is part of the device, is indeed flexible, as recited twice in claim 1. The sensing element, which is also part of the device, may be a photocell or a microwave receiver, for example, as recited in claims 11 and 12. For the meaning of "self-correcting," please see the entire first paragraph of the "Section 112 points in the original response." Applicants believe the paper filed 2/22/2005 was fully responsive to the rejections of claim 1 and accordingly it has again not been amended.

**Second**, examiner says *"In claim 8, line 1, it appears that -is- should be inserted after '7'"*. Claim 8 would then read "Sensing element device of claim 7 is installed in a doorway." To be consistent, the examiner should require changing claim 7 to read "Sensing element of claim 1 **includes** wires for connecting..." instead of "...including wires...." Applicants' syntax is far more conventional and has a venerable history of acceptance in both the Patent Office and the courts. The usual practice is to assume a sentence begins "We claim" followed by the words of the individual claim, which completes a sentence. Thus claim 8, with examiner's modification, would contain two verbs – "claim," and "is." Applicants prefer not to use "is" since the additional verb would require use of the introductory "wherein" or some other unduly complicating modification. See MPEP2173.01. MPEP608.01(m); *Fressola v Manbeck*, 36USPQ2d1211 (DDC, 1995). Applicants believe the paper filed 2/22/2005 was fully responsive; in any event no amendment will be offered to claim 8 since applicants believe examiner's suggestion that "is" should be inserted would require additional wording.

**Third**, examiner says *"In claim 13, lines 3-4, the phraseology 'to detect presence or motion in or near said door' is not readily understood by the Examiner. Specifically, how can the device detect*

*presence 'in' the door?"* The current amendments to claim 13 remove the possibility that the system would be called upon to detect presence or motion within the door itself, by substituting "doorway" for "door" in the appropriate places, as alluded to in the original explanation of the amendments. Thus no explanation is needed for how the device can detect presence in the door. Again, applicants believe that the amendments and explanation of them were fully responsive.

**Fourth**, examiner has objected to a lack of antecedent for "presence" and "path" in claim 13. This phraseology has been changed by the fully responsive amendment, which should need no explanation.

**Fifth**, examiner says there is an antecedent problem with "presence" and "path" in claim 20. Applicants disagree. Both the presence of a person or object and the path of the "automatic door in the process of opening" are inherent and need not be recited simply to establish an antecedent. "Inherent components of elements recited have antecedent basis in the recitation of the components themselves. For example, the limitation 'the outer surface of said sphere' would not require an antecedent recitation that the sphere has an outer surface." MPEP §2173.05(e).

**Sixth**, examiner notes "*(i)n claim 13, line 2, the applicant recites 'a door'. Is this the same door as the 'automatic door' recited in claim 13, line 1?*" As indicated above, claim 13 has been amended so that the word "door" does not appear by itself – it is consistently preceded by "automatic." Also, a distinction is made between the automatic door and the doorway. Applicants believe the paper filed 2/22/2005 was fully responsive to this question.

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Referring now to the rejections on 35USC102(b), the patent to Simmons is cited against all but eight of the claims, the Examiner saying, among other things, that Simmons has a "generally elongated flexible support member (30, 28 and 24)...." But these members are not flexible as required by applicants' claims – they merely rotate on roller axle 16. Simmons does not describe them as flexible. Nor are they even close to being "generally elongated." Note also that what Examiner describes as Simmons' "base end (34)" is a screw. Moreover, the Examiner's listing of the elements of Simmons' mechanism rightly omits anything resembling the last limitation of applicant's claim 1, "said generally elongated flexible support member being capable of returning to its original

shape after being deformed.” This important limitation is clearly not present in Simmons. Similar limitations are at the ends of claims applicants’ 13 and 20, the other independent claims, the main difference being that the flexible support member may have been bent (subject to a “bending force”) rather than “deformed.” Simmons does not have all the elements required to meet the claims, and the rejections should be withdrawn.

Next, the same claims and also claim 18 are rejected as unpatentable over Strand, under 35USC102(b). The Examiner says Strand’s generally elongated flexible support member is Strand’s element 44. This means Examiner has to construe elements 34, 36 and “the portion that extends below the base end” (Examiner’s words) as the ends of the flexible support member. But these are the upper and lower portions of the profile of element 44. This does not work. Applicants’ “generally elongated flexible support member” must be construed as having the ordinary meaning of an elongated member, namely that the ends are at the ends of the elongated shape, or, as specified in claim 1, having “an axis in the direction of elongation,” which, by its ordinary meaning, leads to opposite ends of the axis. Viewed in this manner, the logical, ordinary construction of the words in applicants’ claims means that the upper and lower parts of Strand’s U-profile member are not ends, as suggested by Examiner – his ends are at the extremities of his “sensing edge 10.” The U-shaped outer covering 44 of channel 18 (see column 3, lines 19 et seq) has a light source assembly 56 at one end and a photoswitch assembly 68 at the other end (see lines 38-48 of column 3). Strand himself construes his own “outer covering” 44 as having ends consistent with the ordinary meanings of the words. Examiner cannot ignore Strand’s own description. In addition, note that applicants’ claim 20 requires two flexible generally elongated supports, which are clearly not present in Strand.

Next, claims 10 and 18 are rejected under §103 on Simmons in view of Larsson. Claims 10 and 18 include a photocell, which Examiner says is provided by Larsson. But Larsson does not make up for the deficiencies in Simmons pointed out above. The inventions of claims 10 and 18 have not been assembled by Examiner, and are not obvious from the combination. Further, there is no mention in Larsson of a resilient or flexible member, and accordingly there would be no motivation for combining the two references.

Levin et al is combined with Strand for the rejections of claims 4, 5, 16, and 17, the Levin et al reference said to provide the requisite Shore hardness. As with the rejections on Simmons and Larsson, Levin et al do not make up for the deficiencies of Strand pointed out above. It should be

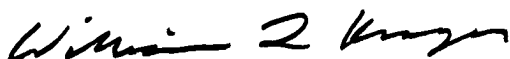
noted that the electrical parts of Levin's device operate by closing a circuit or otherwise activating when it is deformed, which is not the way applicants' device operates, and accordingly there would be no motivation to combine the two references.

Simmons is then combined with Evans for a rejection of claims 11 and 12 under §103, and the same claims are further rejected on Strand in view of Evans. Again, as pointed out above, neither Simmons nor Strand meets all the limitations of the independent claims, and Evans, cited only for his use of microwaves and ultrasonics, does not make up the deficiencies of either Simmons or Strand.

In view of the above arguments and amendments, the rejections should be withdrawn.

Please note the attachment showing the claims in their current (as amended) status.

Respectfully submitted,

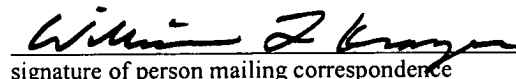


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